



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/644,947	08/19/2003	Ming Gao Yao	12553/84	6795

7590 05/02/2008  
KENYON & KENYON  
Suite 600  
333 W. San Carlos, Street  
San Jose, CA 95110-2711

EXAMINER
----------

KEENAN, JAMES W

ART UNIT	PAPER NUMBER
----------	--------------

3652

MAIL DATE	DELIVERY MODE
-----------	---------------

05/02/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/644,947	<b>Applicant(s)</b> YAO ET AL.	
	<b>Examiner</b> James Keenan	<b>Art Unit</b> 3652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 February 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 23-26 and 28-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 23-26 and 28-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

Art Unit: 3652

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 23-26 and 28-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hollowell (US 6,071,056) in view of Kunii et al (US 2001/0023839 or US 7,059,476, which have the same disclosure and effective filing date), all previously cited.

Hollowell shows a method, comprising placing a plurality of components of hard disk drive head gimbal assemblies (HGA's) in containment units of a tray 11 (packing tray), placing another tray 11 (exchange tray) above and in contact with the packing tray such that corresponding containment units of the exchange tray match those of the packing tray, and rotating the trays together to simultaneously move the plurality of components from the packing tray to the exchange tray (fig. 6, col. 2, lines 61-67). Elements 61 and 63 of the packing and exchange trays are considered to be "limiters" which "match", as broadly claimed, inasmuch as applicant fails to recite any structural or functional limitations of same. Further, the unlabeled cutout portions on the sides of each tray (see figs. 1, 2, 4, and 7) are considered to be "ventilation slots", absent any structural limitations of the term.

Hollowell does not disclose inverting the exchange tray with respect to the packing tray.

Kunii et al show in both the prior art figs. 5-6 as well as the invention figs. 11-12 that inverting a tray prior to positioning it above and in contact with a tray of electronic components and subsequently rotating the trays together to move the components from containment units in one tray to corresponding containment units in the other tray is an alternative to merely stacking or nesting the trays prior to rotation. Similarly to Hollowell described above, any one of the cutout portions 4f is considered to be "at least one ventilation slot", absent any structural limitations.

It would have been obvious for one of ordinary skill in the art at the time of the invention to have modified the process of Hollowell by inverting the exchange tray instead of merely stacking prior to positioning it on the packing tray, as shown by Kunii et al, as this is explicitly disclosed as an alternate means of moving electronic components between trays, dependent on which side of the components is desired to be inspected.

Re claims 25-26, the containment units of Hollowell have indentations and prongs to hold the components in place, as clearly shown in figs. 3-5.

Re claims 28-31, the HGA's of Hollowell comprise read/write heads, sliders (micro-actuators), and suspensions (col. 1, lines 10-32).

3. Claims 23-26 and 28-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Kunii et al reference, as noted above, in view of Hollowell.

Kunii et al do not show the electronic components to be hard disk drive components.

It would have been obvious for one of ordinary skill in the art at the time of the invention to have modified the process of Kunii et al by utilizing the trays to transfer hard disk drive components, as shown by Hollowell, as this would merely be the substitution of a particular kind of electronic component, the use of which would neither require undue experimentation nor produce unexpected results.

4. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hollowell in view of Kunii et al, or vice-versa, as applied to claim 23 above, and further in view of Wanesky (US 3,263,841), previously cited.

Neither Hollowell as modified by Kunii et al nor Kunii et al as modified by Hollowell shows the step of securing a pin hole in an exchange tray with a pin hole in a packing tray.

Wanesky shows a system of transferring electronic parts between trays, comprising alignment pins 43 for securing corresponding pin holes 28 and 32 in the trays.

It would have been obvious for one of ordinary skill in the art at the time of the invention to have further modified the process of Hollowell in view of Kunii et al, or vice-versa, by utilizing corresponding pin holes in the exchange and packing trays, as suggested by Wanesky, to help in aligning and securing the trays during rotation thereof as further assurance that the components would be properly transferred therebetween.

5. Applicant's arguments filed 2/19/08 have been fully considered but they are not persuasive.

Applicant argues that no reference shows "at least one ventilation slot", stating that the cutout portion 4f of Kunii et al is not located along the surface of the packing tray and is of no use in providing ventilation to the pocket 4b. However, no such limitations or requirements of the ventilation slot are set forth in the claims. As noted above, both Hollowell and Kunii et al are considered to show a structure which meets such a broadly recited limitation of a "ventilation slot".

Furthermore, the previously cited patent to Pakeriasamy (US 5,848,702) shows ventilation apertures 38 in a similar tray. Thus, even if applicant further defined the ventilation slots, this reference would likely be used in an obviousness rejection.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Keenan whose telephone number is 571-272-6925. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saul Rodriguez can be reached on 571-272-7097. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/James Keenan/  
Primary Examiner  
Art Unit 3652

jwk  
4/30/08